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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/751,859	01/06/2004	James J. Bartel	7663-000003/COD	4846
27572	7590	06/29/2006	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			VANAMAN, FRANK BENNETT	
			ART UNIT	PAPER NUMBER
			3618	

DATE MAILED: 06/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/751,859	BARTEL, JAMES J.	
	Examiner Frank Vanaman	Art Unit 3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 17 April 2006.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 9,10,12-17,19-24 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) 13,14,20,21,27 and 28 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 9, 10, 12, 15-17, 19, 22-24, 26, 29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

### **Status of Application**

1. Applicant's amendment, filed April 17, 2006, has been entered in the application. Claims 9, 10, 12-17, 19-24 and 26-29 are pending, with claims 13, 14, 20, 21, 27 and 28 withdrawn from consideration, and claims 1-8, 11, 18, and 25 having been canceled.

### **Claim Objections**

2. Claims 9, 16 and 23 are objected to for the following informalities: in line 5 of each claim, the phrase "from approximately front of..." is grammatically informal.

Appropriate correction is required.

### **Claim Rejections - 35 USC § 103**

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 9, 10, 12, 16, 17, 19, 23, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilden (US 5,012,885, cited previously) in view of Vin (US 4,039,037). Hilden teaches a vehicle having an engine (128) having a power output through a single-segment drive shaft (126) which connects to a differential unit (18) held immovably on the vehicle frame (col. 3, lines 1-7); provided with a pair of swing axles (70, 72) which connect to drive the rear wheels (32) the differential unit being located at the rear axles; a low profile suspension (20, 22, 24, below frame portions 12, 14), the frame capable of supporting a load floor there-above (above 12, 14), which extends from the approximate front of the frame portions to the rear of the frame portions and vehicle; the suspension including a pair of trailing arms (20, 22) pivotally mounted (at 40/48) outwardly of the frame portions 12, 14 which may support the load floor; a torsion box (30, 28) positioned between the trailing arms, an air spring system (34) between the torsion box and the frame underside; first and second wheel support members (88) which extend upwardly for the first and second trailing arms, wherein relative motion between the wheels and differential is allowed in the motion of suspension 20, 22, 24, whereby the wheel axes may be higher or lower than the output axes of the differential in use. The reference to Hilden fails to specifically teach the provision of a load floor on the frame portions. Inasmuch as it is very old and well known to provide a chassis with a floor, it would have been obvious to one of ordinary skill in the art at the time of the

invention to provide a load floor on the frame portions (12, 14) for the purpose of allowing the vehicle to carry items in transport. The reference to Hilden fails to teach a step-down power transfer device having an input and an output which is axially offset from the input. Vin teaches a vehicle drive scheme wherein an engine output (3, 4) is stepped down by a geared axial drive converter (6, 7) having an input (connected to 5) and an axially offset output (connected to 7, 8). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the vehicle of Hilden with a step-down gearing as taught by Vin, allowing the output of the engine to be transmitted to an axially offset drive shaft, for the purpose of reducing the front-to-back slope of the drive shaft, facilitating a greater rearward displacement of the drive wheels with respect to the engine.

5. Claims 15, 22 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hilden in view of Vin and Maurer (cited previously). The references to Hilden and Vin are discussed above and fail to teach step-up gear drives connecting the axles and the wheels. Maurer et al. teach a drive scheme wherein driven wheels are driven by an offset axle (phantom, figure 1), including an input gear, a pair of intermediate gears and an output gear (figure 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a step-up gear system as taught by Maurer et al. to the vehicle of Hilden as modified by Vin, for the purpose of stepping up drive torque and dropping drive speed in a convenient and compact arrangement.

#### **Response to Comments**

6. Applicant's comments, filed with the amendments, have been carefully considered. Applicant has asserted that Hilden fails to teach a half-shaft differential. The examiner disagrees. Differential 18 is connected to drive rear wheels through a pair of half shafts, shown at 66 and 68. The conventional spline applicant refers to in the comments is located at the wheel end and not at the differential. Furthermore, each shaft is provided with a universal joint at the differential (junction of 66 and 68 with 18) and at the wheel end (74). The differential taught by Hilden is explicitly taught to be fixed to the vehicle body, whilst the wheel mounts (32 in general) are connected so as to be movable vertically with respect to the body, as is explicitly discussed in the

'disclosure of the invention' section, and as can be easily determined from a cursory perusal of the drawings at least. Applicant's statement that Hilden "discloses axles rigidly affixed to the differential" has no factual basis in the reference, and applicant is explicitly invited to support this assertion by a showing of evidence. Applicant has asserted that there is no motivation to combine the reference to Vin with that of Hilden because of a different location of the differential. The examiner agrees that Vin locates the differential in another location, however it is not this facet of the reference which has been relied upon, rather it is the teaching that it is well known to use a vertical displacement of an input with respect to an output in a gear train to prevent the need to use a sloped drive shaft. If applicant indeed believes that it is not within the skill of the ordinary practitioner to use a gearing arrangement to provide an axial displacement of input to output shafts, then applicant should explicitly state such in the record.

Applicant is additionally reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965).

### Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry specifically concerning this communication or earlier communications from the examiner should be directed to F. Vanaman whose telephone number is 571-272-6701.

Any inquiries of a general nature or relating to the status of this application may be made through either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A response to this action should be mailed to:

Mail Stop \_\_\_\_\_  
Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450,

Or faxed to:

PTO Central Fax: 571-273-8300

F. VANAMAN  
Primary Examiner  
Art Unit 3618



The signature is handwritten in black ink, appearing to read "F. VANAMAN". Below the signature, the date "6/26/06" is written in a smaller, cursive hand.